

ABSTRACT

Leak Detector

The leak detector operating according to the counterflow principle comprises a first high vacuum pump (16) which operates in series with a primary pump (20). A second high vacuum pump (22) is branched at a connecting point and the entry side thereof (23) is connected to a mass spectrometer (24). A light test gas in the form of helium flows through the second high vacuum pump (22) in an opposite direction with respect to a transport direction. A conduit (40) connecting an inlet (13) to the entry side (15) of the first high vacuum pump (16) is devoid of restricted flow zones and valves in such a way that the pumping capacity of the inventive leak detector is high for helium, thereby reducing the response time thereof. A valve (18) for blocking the conduit leading via the first high vacuum pump (16) is arranged between the exit side (17) thereof and the entry side (19) of the primary pump (20).

(Fig.)